

REMARKS

Claims 1-26 are pending in the present application. Claims 1-26 are rejected. Upon belief, it is respectfully submitted that this paper is fully responsive to the outstanding Office Action.

Specification

The Specification has been amended as appropriate to state “Fig. 5” instead of “Fig. 5A.”

Objections

The drawings were objected to under 37 CFR 1.83(a) because they failed to show FIG. 5A as described in the specification, page 27, line 5.

The drawings were objected to as failing to comply with 37 CFR 1.84(p)(5) because they allegedly include the following reference character(s) not mentioned in the description: S33 in FIG. 22.

The Examiner has pointed out that the drawings accompanied to the present application do not include “Fig. 5A” which is described on line 5, page 27 of the specification. The “Fig. 5A” in the specification is a grammatical error, and as such, the Specification has been amended as appropriate to state “Fig. 5”.

The Examiner has further pointed out that Fig. 22 has reference number “S33”, which is not included in the specification. However, a procedural step concerning the reference number “S33” is detailed on lines 2-3, page 45 of the specification.

In view of the foregoing, it is respectfully requested that the objections be withdrawn.

Claim Rejections under 35 USC § 101

Claim 25 was rejected under 35 USC §101 with the claimed invention allegedly being directed to non-statutory subject matter.

The rejection is respectfully traversed.

The Examiner has rejected claim 25 because the computer-readable recording medium comprises “printed matter or the like” as defined in the specification, line 7, page 51.

However, claim 25 does not recited printed matter. Instead, claim 25 is directed to a “computer-readable recording medium”. It is respectfully submitted that claims directed to a “computer-readable recording medium” are a very common practice in this technical art. If the Examiner maintains the rejection, it is respectfully submitted that the Examiner be more precise in indicating what is inappropriate by claiming a “computer-readable recording medium”.

In view of the foregoing, it is respectfully submitted that the rejection is overcome.

Claim Rejections under 35 USC § 103

Claim 1-26 were rejected under 35 USC §103(a) as being unpatentable over Sakaguchi et al (US 5,946,479) and in view of Nishiura (US 2002/0052720 A1).

The rejection is respectfully traversed.

It is respectfully submitted that the cited art fails to describe or teach either alone or in combination at least the recitation of claim 1 of the present application of, “a mesh dividing unit

for performing a mesh dividing process so as to divide said analytical target model, based on a parameter kit selected by said selecting unit (hereinafter referred to selected parameter kit) and said three-dimensional CAD data, into cuboids of less than or equal to the maximum number of cuboids included in said selected parameter kit.”

The Examiner has pointed out (item 4 pages 3-4) that, concerning claim 1 of the present application, Sakaguchi teaches the mesh dividing unit (col. 8, lines 45-46 and lines 51-55, FIG. 25, S611) and Nishiura teaches the library and the selecting unit (FIG. 2, paragraphs [0077] and [0100]).

Sakaguchi discloses that: “Mesh generation unit 10 divides the geometric model of the object to be analyzed to generate mesh; Initial condition/boundary condition storage unit 110 stores initial physical conditions, boundary conditions, physical properties and material properties of the regions to be analyzed which are input before computation is performed” (see col. 8, line 50-55). In addition, Sakaguchi details S611 in Fig. 25 that “This additional step is (S611) which judges whether the limit condition is satisfied for a block, with the process returning to (S103) and the block being newly set as a block to be divided when the limit condition is not satisfied” (see col. 24, lines 48-52). Here, concerning the limit condition, Sakaguchi discloses (see col. 24, lines 55-60) that the limit condition for the geometric model in the present embodiment is “the boundary line of the geometric model is continuous within each block and that no block contains more than one point where the boundary line of the geometric model is joined.”

Nishiura describes in paragraph [0009] that, “According to the present invention with the above characteristics, the analytical data description screen (e.g. an HTML-format screen or space) to be filled with analytical data descriptions is provided in every step of the analysis procedure. Owing to this arrangement, an operator having specialized knowledge about CAE analysis can describe analytical data regarding a given analysis object onto the analytical data description screen. As a result, the general-purpose analysis software can be made into special-purpose analysis software which is dedicated to the analysis of the given object, by modifying the analytical data part. While the conventional art involves the trouble of creating the whole of special-purpose analysis software from scratch in order to deal with individual analysis objects, the present invention can remarkably cut the time for developing analysis software and reduce the development cost.”

Paragraph [0100] of Nishiura pointed to by the Examiner in the outstanding Office Action teaches, “On the other hand, the analyzer may click on the message ‘Create an input file and execute the analysis’ with the mouse, etc. At a click of the apply button 184 with the mouse, etc., an input file is created first, and the analysis computing unit 5 thereafter carries out the analysis based on the created input file (Note that the input file is stored in the analysis information file unit 62b.). The analysis results are stored in the analysis file unit 62c.” Paragraph [0077] of Nishiura similarly pointed out by the Examiner describes that, “To begin with, an analyzer starts up the present device, allowing the initial screen 10 of Fig. 3 to appear in the display unit 1. The analyzer then selects either ‘Create a new file’ or ‘Open an existing file’ in the display window 12 (step S1). For the purpose of explanation, suppose ‘Create a new file’

is selected. Incidentally, if ‘Open an existing file’ is selected, the system opens an existing modeling database of previous analyses.”

It is possible that Sakaguchi, which, according to the Examiner’s point of view, discloses the mesh dividing unit of the present application, divides a geometrical model of an object into meshes. However, Sakaguchi is totally silent about “a maximum number of cuboids” which the present application concerns. In particular, S611 in FIG. 25 has been pointed out to correspond to “division into cuboids of less than or equal to the maximum number” by the Examiner, but merely discloses the limit condition for the geometric model, which is the boundary line of the geometric model is continuous within each block and that no block contains more than one point where the boundary line of the geometric model is joined, as described above. As a consequence, S611 in Sakaguchi does not teach or suggest “the maximum number of cuboids”.

From the above argument, since Sakaguchi is directed to mesh division based on “the limit condition for the geometric model” irrespective of “the maximum number of cuboids” and Nishiura relates to displaying of analysis data of an analysis object on an analysis data description screen in order to reduce time required for developing analysis software, the simple combination of Sakaguchi and Nishiura does not reach the concept of the invention which makes it possible to easily select and determine the appropriate maximum number of cuboids.

Claims 2-24 which dependent either directly or indirectly from independent claim 1 are patentable for at least the reason of their dependency therefrom. Separate and individual consideration of the dependent claims is respectfully requested.

Application No.: 10/806,333
Art Unit: 2628

Response under 37 C.F.R. §1.111
Attorney Docket No.: 042258

Regarding claim 25, it is submitted that the cited art fails to describe or teach either alone or in combination at least the recitation of the mesh dividing unit as recited in said claim. Further, regarding claim 26, it is submitted that the cited art fails to describe or teach either alone or in combination at least the recitation of the “setting” recitation as recited in claim 26 of the present application.

In view of the foregoing, it is respectfully submitted that the rejection is overcome.

In view of the aforementioned remarks, Applicants submit that the claims are in condition for allowance. Applicants request such action at an early date.

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney to arrange for an interview to expedite the disposition of this case.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

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